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DEFINING AN HOMOGENEOUS REPUTATIONAL TOURISM REGION:

METHODOLOGICAL ASPECTS AND AN APPLICATION TO THE AOSTA VALLEY

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ABSTRACT

This paper provides some insights on how to delineate the boundaries of a homogeneous reputational area in the tourism sector, both in terms of the geographic and service characteristic space. We start presenting a general procedure, which can be easily applied to data usually collected in customer satisfaction surveys, by considering as a measure of reputation the perceived quality on the different aspects of the visit during the holiday. We use this procedure over a database of 1749 tourists interviewed in the summer 2008 in Aosta Region. Our methodology can be of interest not only for the theoretical debate but also for policymakers involved in territorial marketing.

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1 Introduction

Regions have acquired importance in the last decades as emerging centres of planning and spaces of flows of resources. In Europe, the European Community has played a role in this movement both with political actions - the creation of the Commette of Regions (COR), in 1994, appeared to "herald the prospect that regional governments within member-states would have an explicit link to EU decision-making and policy formulation" (Deas and Lord, 2006: 1849) - and financial support – the European Commission's programmes have emphasised the creation of new regional territories in order to promote competitiveness across the EU as a whole, favour territorial cohesion and diminish interregional disparities -.

Tourism development has played a role in many European programmes and the *touristic production of space* (Prokkola, 2008) by means of the building of cross-border tourism destinations has contributed to strengthen regional identities, cluster tourist attractions, create tourism routes and transportation and knowledge sharing (Prokkola, 2008; Chang 2001). Many EU-funded programmes, such as LEADER, INTERREG, Objective 1, 2 and 3 funded by the European Regional Development Funds (ERDF), have promoted the spread of "integrated programmes", regions of networking and cooperation for common territorial development goals. The National authorities in charge of managing the resources (Regions - NUTS-2 - in Italy) have had to deal with the problem of the approach to be adopted in the definition of the appropriate scale and of the boundaries of the planning areas. Taking as an example the Objective 2 Programme 2000-2006, in Italy most Regions have chosen to invest in local integrated programmes in order to foster local development strengthening tourism or other territorial resources. Different approaches have been adopted in order to identify the geographic boundaries of these programmes: some Regions, i.e. Lombardy Region, have opted for a bottom up approach, leaving to the single municipality eligible for the funds the choice of the areas to associate with. Other Regions, i.e. Tuscany Region, have defined the confines based on administrative boundaries, i.e. the NUTS 1 areas of the Region.

Also outside the European funds and policies, integrated programmes such as tourism systems and districts have been financed by many Italian Regions because recognised as promising programming tools for developing coordinated actions for tourism development.

Despite the diffusion of such initiatives, few indications have been provided in the literature and consensus lacks on methods and criteria in order to define the boundaries of a region, and particularly a tourism one. In this paper we aim at suggesting a method for the identification of a tourism region based on the criterion of the homogeneity of reputation.

2   Collective reputation and its determinants

Reputation is a fundamental value not only at the firm level, but also at the industry and territorial ones, and particularly in the case of experience goods. Collective reputation is also important and deserves attention since many products and services are the result of the interaction of the behaviours of several actors, each influencing the final output and thus each influencing the reputation of the others. This concerns firms, territories and so on.

A sector in which the topic of collective reputation deserves major attention is tourism, for two main reasons. First of all tourism is by definition a composite sector, whose services and products are generally provided by a multiplicity of different actors of various nature, from lodging structures to restaurants, from cultural industries to public authorities dealing with aspects of accessibility etc. The overall quality of the tourist experience is thus affected by the quality perceived over the different aspects and the different producers and service providers.

Alongside the multiplicity of actors involved there is the involvement of multiple areas. Tourism, in fact, is an experience which develops over a territory, whose boundaries and dimension vary in accordance with the local system of supply. Usually a tourism area is composed of multiple municipalities which may have different features, but are usually homogeneous in quality, and complementary in nature.

The lack of homogeneity in the qualities of the territories or of the service providers, which can be thought of as complementary goods and services, can determine a problem in the perceived collective reputation.

In the literature, while there is a consistent attention on reputation, collective reputation is a less studied topic. Exceptions are two theoretical models and some empirical works aiming at measuring reputation in quality products such as Bordeaux wine.

Tirole models "the idea of group reputation as an aggregate of individual reputations" where "a group's reputation is only as good as that of its members" (Tirole, 1996, p.1).

Reputation plays a role in the consumer's decision process especially in the case of experience goods - whose quality is not fully knowable a priori but only after purchase and consumption - and in credence goods, whose quality is not fully appreciated even after consumption. This is the case for instance of products covered by protected designations of origin, for which the consumer have to trust in the information given by the producers. A further feature of this kind of goods is that they are usually covered by collective marks, thus implying that the reputation of one producers is influenced by the reputation of the others belonging to the group and vice versa. These are the two main reasons why many of the studies about collective reputation involve a product covered by a designation of origin.

Most empirical models study the impact of reputation and collective reputation on price, mostly using hedonic price regressions (Landon and Smith, 1998; Combris, Lecocq and Visser, 1997; Quagrainie et al., 2003).

In tourism studies the topic of collective reputation is less considered. However, the tourism industry shares the two features highlighted above, i.e. it can be considered an experience good and the reputation of one producer or service providers involves the reputation of the others.

The collective reputation of a tourism destination can be thought of as a function of two main dimensions: the geographic space (a tourism region is composed of many sub-regions) and the service space (the tourism experience available in the region is composed of many services and attributes).

Some destinations may have a homogeneous reputation across both dimensions. An evaluation over the different attributes and sub-areas would give similar results for all pair area/attribute, at least for those at the core of the tourist supply. An example is the Chianti shire, in Tuscan Region, Italy, promoted as a unique destination although composed of several territories because of their sharing in the consumer's mind a same image of beautiful landscape, quality foods and wines, farm accommodations etc.

Other tourism areas may be composed of several sub-regions as well, sharing similar attributes and targeting their offer to the same markets, but the perception of the different sub-regions may differ in the consumers' mind. For this reason some locales choose to promote their offer by their own, although inserted in a greater region, homogeneous for attributes but not for quality. Sondrio and Bormio, for instance, winter destinations in Lombardy Region, Italy, known for the high quality level of their supply, have a different reputation from the Valtellina region they belong to, and their promotion activities is independent from that of the rest of the Valley.

These example provide evidence of why we propose that sharing a same homogeneous reputation is a criterion to be taken into account in the definition of a tourism region.

3   Aims of the research

In this paper we propose a methodology in order to measuring the collecting reputation of a tourism destination and define the "optimal" boundaries of a tourism system:

  – across the geographical space
  – across the space of the services and attributes

This has important practical implications both for the construction of a system of supply and for promotion activities.

Defining tourism regions which are homogeneous in terms of reputation over both the geographic and the services dimensions may help to define which level is the most appropriate for promotion or destination management activities.

Considering the promotion side, strategies can vary considerably. Once defined the system, it can be promoted over the whole set of different attributes or just the most relevant in terms of reputation can be used. This methodology can be applied to understand which the elements of strength and weakness in the regional system of supply are, in order to undertake proper policy actions, i.e. focus on the excellent elements or rather improve the supply for the weakest which are important for consumers.

The methodology is tested on the case of the Aosta Valley Region.

Table 1- Main variables employed in the analysis

Symbols	Definitions
Satisfaction variables	
EVAC	Overall satisfaction: likert-scale 0-4 (0=completely unsatisfied; 4 completely satisfied)
Open	Satisfaction from open air activities: likert-scale 0-4 (see: EVAC)
Cult	Satisfaction from cultural activities: likert-scale 0-4 (see: EVAC)
Enter	Satisfaction from entertainment activities: likert-scale 0-4 (see: EVAC)
Restaurant	Satisfaction from restaurants: likert-scale 0-4 (see: EVAC)
Lodging	Satisfaction from lodging structures: likert-scale 0-4 (see: EVAC)
People	Satisfaction for hospitality of the community: likert-scale 0-4 (see: EVAC)
Enog	Satisfaction from eno-gastronomic products: likert-scale 0-4 (see: EVAC)
Sport	Satisfaction from sport activities: likert-scale 0-4 (see: EVAC)
Destination and socio-demographic variables	
r1-r11	Region of destination (AIAT): 11 categories: "Aosta"; Cogne Gran Paradiso"; "Gran San Bernardo"; "Grand Paradis"; "La Thuile"; "La porta della Vallée"; "Monte Bianco"; "Monte Cervino"; "Monte Rosa"; "Monte Rosa Walser"; "Saint Vincent". In order to maintain the confidentiality over the data, AIATs have been renamed r1-r11 in descending order according to the number of tourist flows in 2008.
COUPLE	Dummy variable taking the value of 1 if travelling with partner
STAR	Number of stars of the lodging structure: 3 possible answers: 2=1 or 2stars; 3=3stars; 4=4 stars
STAR2-STAR4	Dummy variables created from STAR
GENDER	Dummy variable. 1=male.
AGE	Age: 5 levels: 1=under 31; 2=31-40; 3=41-50; 4=51-65; 5=>65
AGE1-AGE5	Dummy variables created from AGE
EDUC	Education: 6 levels: 1=primary school; 2=secondary school; 3=high school; 4=undergraduate; 5=graduate; 6= post-graduate
EDUC1-EDUC6	Dummy variables created from EDUC
PROV	Region of Provenance. 4 categories: 1=North West Italy; 2=Rest of Italy; 3 France; 4=rest of the World
PROV1-PROV4	Dummy variables created from PROV

4 Data description

Data come from a survey conducted in Summer 2008 aimed at exploring the level of satisfaction experienced by the tourists visiting the Aosta Valley. Among the various aspects

investigated by the questionnaire, a central role was reserved to get information on which kinds of activities tourists attend and the evaluation of each activity as well as of the whole vacation. Other sections aimed at gathering information on the booking channels, the transport mean, the composition of the party, the performed activities and a final section was devoted to personal information of respondents. Data were collected at the lodging structures and, in smaller part, at the Tourism Offices. The survey considered only tourists who have spent one or more nights in hotels or campings of the Valley. All the other visitors are excluded. For each party one questionnaire was distributed. In case of incomplete or incoherent answers to questions, the questionnaires have been discarded. Of 3037 initial responses, 1749 (58%) have been considered. Table 1 provides a description of the variables considered in the analysis.

5   Research questions and methodology

In our model, reputation depends on quality, which is approximated by customer satisfaction deriving from the holiday experience, evaluated overall and on the different aspects and services.

Once defined the measure of reputation the model will use, it is necessary to define the concept of "collective". In this paper collective reputation has a twofold perspective: on the on hand, the collective reputation of the whole Aosta Valley is considered as an aggregate of the single reputations of the different AIATs. On the other hand, the collective reputation of the region is considered as the judgement over the overall experience, where single reputations are expressed regarding the different aspects of the holiday (accommodation, accessibility etc.).

In order to identify the most appropriate scale and composition of a tourism region, both in terms of the geographic space and of the services' space, a methodology is proposed which consists of the following four steps:
   1. Map of the reputation for geographic/service spaces
   2. Selection of areas and services for possible homogeneous tourism systems
   3. Check of the homogeneity of reputation using multilevel modelling
   4. Comparison with consumers' judgements about attributes' importance

In the following paragraphs each step is analysed in more detail.

5.1 Map of the reputation for geographic/service spaces

In order to understand the homogeneity of the tourism supply across regions and services, a panel dataset have been composed where one dimension represents the individuals and the

other the evaluation over the different aspects of the supply. 88 dummy variables (8 services/attributes times 11 areas) have been created, each representing one combination of AIAT and service. The dummies have been regressed against the variable expressing the customer evaluation for the 8 services, controlling for a set of socio-demographic variables. The coefficient for each dummy has been summed to the constant to obtain a conditional mean for each combination of area and service.

The means are then plotted and compared in order to infer the degree of homogeneity of the components of the supply.

5.2 Selection of areas and services for possible homogeneous tourism systems

In order to infer which are the most appropriate boundaries of a homogeneous tourism region and around which areas and attributes a tourism brand should be promoted, the evaluation may be based on the existing supply and quality, starting from the map of reputation created following the procedure described in section 5.1.

The criteria for the selection of the tourism region should be the following: (*i*) the geographical proximity; and (*ii*) the homogeneity in reputation of services and attributes. Concerning this second criterion, a twofold perspective can be adopted:

- Homogeneity in reputation and in the system of supply (e.g.: just include in the region and in the promotional brand all those confining areas scoring highly for open air activities and lodging structures); or
- Homogeneity in reputation but complementarities in the system of supply (e.g.: include in the brand also the areas with high cultural and entertainment activities and those scoring highly in eno-gastronomic products).

5.3 Check of the homogeneity using multilevel modelling

Once defined a set of possibilities, the third step consists in the check for the homogeneity of the reputation of the tourism region across geographic space and services' space. Multilevel models (Leckie, 2010a; Leckie, 2010b; Steele, 2008; Steele, 2009) can be employed to verify how the homogeneity of reputation varies in the different hypotheses. The multilevel model, accounting for group effects, enables researchers to investigate the nature of between-group variability and the effects of group level characteristics on individual outcomes.

In its simplest linear structure the multilevel model takes the form:

$$y_{ij} = \beta_0 + u_j + e_{ij}$$

where the first term indicates the value of y for the individual *i* belonging to group *j*, β_0 is the overall mean of y across all groups and residuals are split into two components: the group level residual, u_j, and the individual level residual e_{ij}. The mean of *y* for group *j* is $\beta_0 + u_j$, and so the group level residual is the difference between group *j*'s mean and the overall mean. The individual level residual is the difference between the y-value for the *i*th individual and that individual's group mean.

Both u_j and e_{ij} are assumed to be normally distributed with mean 0 and variance equal to σ_u^2 and σ_e^2 respectively.

In this study, the dependent variables (y_{ij}) expresses the satisfaction of the individual *i* belonging to group *j* over the different aspects of the vacation and overall. Since the original data are expressed in a 5 points Likert scale, the authors have chosen to employ both the linear and the logistic multilevel model. In this second case the outcome variable has been dichotomized, taking the value of 0 for original values of 0, 1 and 2; the value of 1 otherwise. The model makes possible the determination of the effects of individual (level 1) and group (level 2) variables on the individual satisfaction. As group variables, the AIATs[3] have been chosen, being the smallest tourism areas of the Region. According to the results obtained in the previous analysis, this methodology is applied in order to check for the homogeneity of the possible tourism regions identified[4].

In order to reach this goal, the variance partition coefficient (VPC) has to be calculated. It measures the proportion of total variance that is due to the differences between groups, and is expressed by:

$$VPC = \frac{\sigma_u^2}{\sigma_u^2 + \sigma_e^2}$$

The VPC ranges from 0 (when there is no group differences), to 1 (in case of no within-group differences). When dealing with the logistic model, it can be shown that the level 1 residual variance σ_{e*}^2 is fixed and equal to 3.29 (Steele, 2009).

The estimated logit model will have the form:

$$\log(\frac{\pi_{ij}}{1 - \pi_{ij}}) = \beta_0 + \beta_1 X_{ij} + u_{oj}$$

The models are estimated in Stata using the xtmixed command for the linear model and the xtmelogit command for the logistic model, implementing a maximum likelihood estimation procedure using adaptive quadrature.

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[3] AIATs are Agencies managing the tourism offices of the Aosta Valley Region.
[4] This constraint is posed due to the available data for the application. Actually a tourism region could overcome the regional as well as the national boundaries.

5.4 Comparison with consumers' judgements about attributes' importance

Visitors can confer not only different evaluations but also different importance to the various services and attributes. This point is crucial for policy makers, since it allows inferring which the critical factors in the supply are and which influence more the overall reputation.

In considering the attributes importance, asymmetric effects (Füller, Matzler and Faullant, 2006; Mittal, Ross and Baldasare, 1998) have to be taken into account. Recent literature on customer satisfaction has shown that one factor, which would have no significant impact on overall customer satisfaction, may turn out to be significant when the impact of satisfaction is tested separately for low and high factor satisfaction. In order to consider asymmetric effects, multiple regression models can be employed where dichotomised dummy variables are used to indicate highest and lowest satisfaction levels (Füller, Matzler, 2008). For each factor two regression coefficients are obtained: one indicates the impact of the factor when satisfaction for the factor is high and the other when satisfaction is low.

In Füller and Matzler (2008), the equation takes the form:

$$CS_{tot} = \beta_0 + \beta_{1\,fact.1}dummy_{1\,fact.1} + \beta_{2\,fact.1}dummy_{2\,fact1} + ... + \beta_{1\,fact.n}dummy_{1\,fact.n} + \beta_{2\,fact.n}dummy_{2\,fact.n}$$

In our case, since y is an ordered response taking on the values {0,1,2,3,4} ordered logit models are employed.

Figure 1 – Conditional means for each geographic-service space
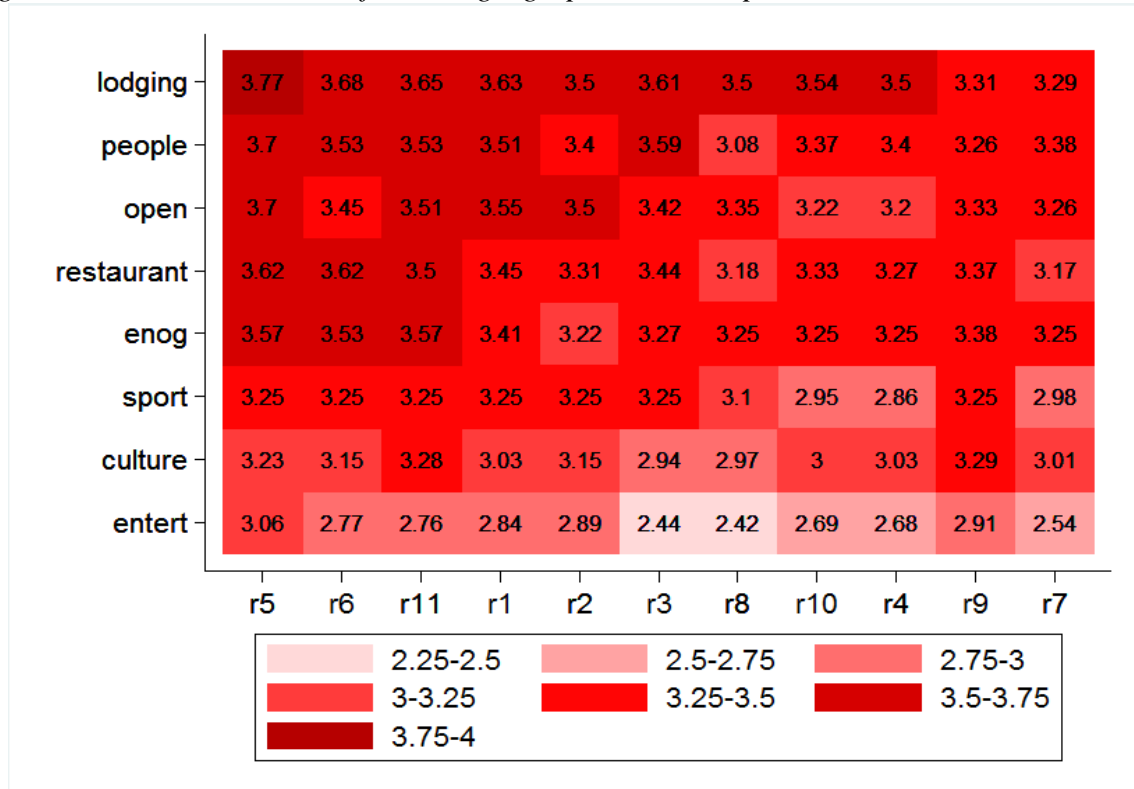
6   An application to the Aosta valley

In this section we test the methodology proposed on the case of the Aosta Valley.

6.1 Map of the reputation for geographic/service spaces

The model described in section 5.1 has brought to the results displayed in Figure 1. Each cell in the map gives reputation value of one region (AIAT) for one service or attribute, i.e. the value of the conditional mean as explained in section 5.1.

The Figure shows the conditional means for each service in each region. The evaluations range from 2.42 to 3.88. The higher scores are for quality of the accommodation (lodging) and hospitality of the local community (people). The lowest score is attributed to the entertainment variables (entert) and this result is homogeneous for the whole region, where only the area r5 has an evaluation higher than 3. This same area is also the one with higher reputation over the different aspects of the supply.

6.2 Selection of areas and services for possible homogeneous tourism systems

Once identified the scores of each cell in terms of reputation, the second step of the analysis consists in identifying the possible areas of homogeneity. In section 5.2 the criteria for the choice have been motivated, i.e. geographical proximity and, regarding the space of services and attributes, homogeneity in reputation and homogeneity or complementarities in the system of supply.

One possible solution could be the choice of those cells sharing homogeneous reputation, once verified the geographical proximity of the areas. According to Figure 1, for instance, the option could be choosing areas r1, r2, r5 and focus the tourism system and its promotion on open air activities, lodging structures and people's hospitality. These areas, having uniform high reputation in these services and attributes could refuse to be confused with the other AIATs in a homogeneous tourism destination and look for differentiation within their boundaries. Reasons of political (political alliances, links created by tradition and history, policies of inclusion of marginal regions etc.) or technical nature (the reach of a critical mass, the need of adding complementary services etc.) could bring towards an extension of the boundaries, both for the geographic and the service space. The point is understanding which size is optimal under both dimensions.

6.3 Check of the homogeneity using multilevel modelling

Although the graphical representation gives a good idea of the spaces of greater homogeneity, multilevel modelling can be employed in order to infer how the homogeneity of reputation varies when adding services and sub-regions to a core high-reputation agglomeration.

Table 2 shows how the variance partition coefficients change according to the decision of adding services and areas to the core high reputation service-geographic space, following a forward procedure.

Both linear and logit coefficients provide similar results. The first choice reports nil or nearly nil VPCs, demonstrating the high homogeneity of this region in the three considered aspects. Adding areas or services the VPC increases.

Considering all areas and the services open air activities, lodging structures, hospitality of the hosting community, eno-gastronomic and restaurant supply the VPC raises to 3%. This means that the variance attributable to the different AIATs is only 3% of the total variance. A similar result could bring policy makers to conclude that the 11 areas are sufficiently homogeneous to be considered and promoted as a unique destination. Higher values of the VPC (i.e. greater than 10%[5]) could induce to opt for different alternatives.

Table 2- Variance partition coefficients resulting from the linear and logit multilevel models

AIATS	SERVICES/ATTRIBUTES	LINEAR		LOGIT		
		VPC	LR	VPC	LR	WALD TEST
r1, r2, r5	Open, Lodging, People	0.00	0.08	0.01	1.67	0.77
r1, r2, r5, r8	Open, Lodging, People	0.03	29.04	0.04	21.09	3.51
r1-r11	Open, Lodging, People, Enog, Restaurant	0.03	136.38	0.03	60.14	12.25
r1-r11	Open, Lodging, People, Enog, Restaurant, Sport	0.04	278.42	0.04	113.10	17.34

All linear models with the exception of the first give significant results having a Likelihood Ratio greater than 3.85, a 5% point of a chi-squared distribution on 1 degree of freedom. The results from the logit model, instead, are not significant for the first and second model, given a Wald test for all coefficients lower than 3.85 while significant for the third and fourth ones.

6.4 Comparison with consumers' judgements about attributes' importance

In order to verify which services or attributes account more in influencing the overall satisfaction, asymmetric effects models have been applied in an ordered logit regression.

Dummy variables for high and low levels of satisfaction have been built according to the following procedure: being the value of 3 the median for each satisfaction variable, for each service/attribute the dummy for high satisfaction (H) scores 1 if satisfaction = 4; 0 otherwise.

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[5] A threshold can be imposed in the procedure or the evaluation can vary case by case

For each service/attribute the dummy for low satisfaction (L) scores 1 if satisfaction <3; 0 otherwise.

Table 3 presents the results obtained.

In the first column the whole Region is considered. In this case, open air activities, culture, restaurants, lodging structures and hospitality of the community have significant odds ratios higher than 1 for high satisfaction dummy variables and significant odds ratios lower than 1 for low satisfaction dummy variables. This means that such services and attributes contribute to increase satisfaction when they are high while they decrease satisfaction when they are low. Furthermore, the model presents significant and lower than 1 odds ratios for low levels of satisfaction for sport and entertainment activities. In this case, high satisfaction doesn't account for overall satisfaction, while low levels of satisfaction do. For this reason, sport and entertainment activities should be considered by destination planners as important elements of the supply, whose lack or insufficiency can undermine the collective reputation of the tourism system. These results can bring policy makers to consider in the tourism system also culture and entertainment in addition to the services considered in Table 1 because having higher reputation among consumers.

Results can change if the 11 different sub-regions are considered separately in this analysis, as shown in Table 2. The lower number of observations, though, diminishes the significance of the findings.

7   Discussion and concluding remarks

In this paper we have proposed a methodology in order to define the boundaries of a tourism region, based on the individual and collective reputation of the sub-regions eligible for forming the tourism system. The following four steps have been proposed and then tested over the case of the Aosta Valley Region:

1. Map of the reputation for geographic/service spaces, obtaining the conditional mean for each combination of service and sub-region and then plotting them in a map in order to infer the degree of homogeneity of the components of the supply

2. Selection of areas and services for possible homogeneous tourism systems, according to two criteria: the geographic proximity of the areas and the homogeneity in reputation together with the homogeneity or complementarities in the system of supply.

3. Check of the homogeneity of reputation using multilevel modelling

4. Comparison with consumers' judgements about attributes' importance, using an ordered logit model which accounts for asymmetric effects.

Table 3 - Odds ratios from an ordered logit model for asymmetric effects

	(Region)	(r1)	(r2)	(r3)	(r4)	(r5)	(r6)	(r7)	(r8)	(r9)	(r10)	(r11)
OpenH	3.285***	2.762**	4.137***	1.677	6.239***	6.420***	1.118	7.285***	2.532	1.650	1.772	0.515
	(0.457)	(1.128)	(1.638)	(0.849)	(2.056)	(3.780)	(0.606)	(4.517)	(1.625)	(1.636)	(1.188)	(0.473)
OpenL	0.466***	0.319*	1.005	0.340**	0.811	0.146***	1.138	1.083	0.378	0.0124***	0.0480**	0.348
	(0.0791)	(0.188)	(0.566)	(0.183)	(0.298)	(0.106)	(0.795)	(0.724)	(0.245)	(0.0152)	(0.0710)	(0.397)
SportH	1.040	1.049	0.616	0.462	0.802	1.398	1.230	3.519**	2.607	0.573	5.852**	1.085
	(0.142)	(0.435)	(0.250)	(0.234)	(0.247)	(0.895)	(0.681)	(2.052)	(1.712)	(0.497)	(4.301)	(1.011)
SportL	0.760*	0.914	0.435*	0.350**	0.662	1.581	1.389	0.551	1.770	1.855	0.608	1.322
	(0.115)	(0.432)	(0.216)	(0.168)	(0.232)	(1.014)	(0.831)	(0.322)	(1.058)	(1.909)	(0.569)	(1.512)
EnterH	1.314	1.364	0.630	0.857	3.493**	0.229	0.286	0.739	8.330*	0.389	0.435	7.627e+07
	(0.294)	(1.071)	(0.372)	(1.195)	(1.877)	(0.227)	(0.259)	(0.757)	(10.18)	(0.364)	(0.528)	(1.503e+11)
EnterL	0.615***	0.488*	0.727	0.526	0.997	0.228**	0.282**	0.329**	1.733	0.125***	1.240	0.870
	(0.0810)	(0.186)	(0.302)	(0.264)	(0.296)	(0.151)	(0.144)	(0.176)	(1.125)	(0.0995)	(0.941)	(0.700)
CultureH	1.475**	1.630	1.247	3.132	1.641	8.070*	2.063	1.464	0.875	0.636	3.167	0.360
	(0.272)	(1.163)	(0.664)	(2.583)	(0.646)	(9.140)	(1.508)	(1.165)	(0.880)	(0.587)	(3.038)	(0.410)
CultureL	0.751**	0.362**	0.948	0.824	0.733	0.941	1.319	1.143	0.740	2.051	0.282	1.911
	(0.103)	(0.146)	(0.408)	(0.375)	(0.235)	(0.541)	(0.712)	(0.673)	(0.423)	(1.994)	(0.225)	(1.504)
RestaurantH	1.422**	1.550	1.793	1.046	0.945	3.850**	3.365**	1.540	0.400	4.318*	1.351	2.965
	(0.233)	(0.752)	(0.862)	(0.663)	(0.396)	(2.433)	(2.046)	(1.290)	(0.354)	(3.783)	(1.237)	(3.076)
RestaurantL	0.557***	0.495	0.960	0.815	0.510*	0.975	2.011	0.0714***	0.394	0.0731***	1.827	0.260
	(0.0945)	(0.264)	(0.490)	(0.454)	(0.209)	(0.644)	(1.407)	(0.0523)	(0.276)	(0.0652)	(2.365)	(0.341)
LodgingH	2.395***	3.122***	1.841	2.099	3.404***	1.462	3.923**	1.397	4.662**	1.311	2.678	1.784
	(0.346)	(1.296)	(0.801)	(1.220)	(1.098)	(0.772)	(2.415)	(0.937)	(3.107)	(1.255)	(2.668)	(1.828)
LodgingL	0.560***	0.699	0.720	0.545	0.410*	0.587	0.337	0.497	0.366	4.137	0.0368**	3.764
	(0.106)	(0.489)	(0.369)	(0.322)	(0.190)	(0.462)	(0.306)	(0.375)	(0.261)	(3.841)	(0.0579)	(6.619)
PeopleH	1.992***	1.571	1.123	2.488*	2.106**	3.871**	1.101	1.764	2.679	48.68***	2.917	2.595
	(0.274)	(0.657)	(0.486)	(1.332)	(0.635)	(2.218)	(0.630)	(0.920)	(1.737)	(48.54)	(2.581)	(2.368)
PeopleL	0.664**	0.617	0.367**	0.312*	0.570	1.320	0.506	0.913	1.006	0.480	0.380	0.627
	(0.112)	(0.344)	(0.183)	(0.186)	(0.227)	(0.961)	(0.408)	(0.675)	(0.709)	(0.458)	(0.457)	(0.690)
EnogH	1.147	1.103	1.424	0.998	1.079	0.739	2.595	1.212	1.260	1.279	2.251	1.872
	(0.176)	(0.507)	(0.695)	(0.559)	(0.413)	(0.472)	(1.543)	(0.868)	(0.993)	(1.033)	(1.804)	(1.717)
EnogL	0.879	0.964	0.484	0.493	0.639	1.763	1.885	2.231	0.985	3.669	1.730	0.0715*
	(0.146)	(0.495)	(0.251)	(0.272)	(0.258)	(1.098)	(1.327)	(1.505)	(0.627)	(3.437)	(1.995)	(0.107)
Observations	1,749	222	199	147	380	138	123	128	106	136	97	73

Before concluding, it is worth mentioning that this methodology can be applied not only to tourism regions but also to all those areas where productions (and thus their reputation) are linked to the place of origin.

Finally, some drawbacks should be mentioned in order to take them into account for future research development. A first problems regard the data collected, whose features can cause a problem of self selection, since just consumers actually visiting the Aosta Valley have been interviewed. A region could also wish to change its market or focus on new investments and new segments, in which case the analysis should be extended to comprehend a wider market also of non-visitors.

A second limit of the data is that visitors are asked about their satisfaction in general from the holiday, and not specifically for the place where they have been hosted. Thus we can consider the satisfaction about the lodging structure as specific for one place, while the other evaluations could also be referred to services inside the region but outside the place. In future studies this aspect should be considered carefully and data should be gathered separating the evaluations for subareas from those for the overall destination.

8   Acknowledgements

9   References

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